

## REMARKS

Claims 1-6, 8-14, 16, 18, and 20-21 are pending in the present application. Claim 17 and 19 were previously canceled, and claims 7 and 15 are canceled herein. Claims 20-21 have been added, and claims 1, 6, 11, 16, and 18 have been amended herein. No new matter has been added. Applicants respectfully request reconsideration of the claims in view of the following remarks.

Independent claims 1, 11, 16, and 18 along with dependent claims 2-8 and 12-15 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sekiguchi et al. and claims 9 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sekiguchi et al.

First of all, in disregard to the clear teachings of the application, the Examiner argues that the limitations that the memory component be a Programmable Metallization Cell (PMC) is met by any type of programmable *memory* cell. This position is clearly contrary to the teachings of the specification and inconsistent with the Examiner's earlier position through the previous prosecution history of this application.

More specifically, the specification clearly defines a "PMC" memory component as a Programmable Metallization Cell. See page 3, lines 10-17; page 3, line 23 through page 4, line 7; page 6, lines 5-18 and page 7, line 7 and 8. The information contained at these cited locations also briefly describe what a Programmable Metallization Cell (PMC) is and also provides specific references where such PMC devices are discussed in detail. Nowhere in the specification is there any suggestion what so ever that the initials "PMC" can represent a "Programmable *Memory* Cell" as argued by the Examiner. Yet after three

Office Actions, beginning in November 2005, for the first time and without any basis for doing so the Examiner unfairly decides she can meet the required limitation that the PMC memory component be a Programmable *Metallization* Cell by any type of Programmable Memory Cell. This is simply improper. The initials "PMC" are clearly defined in the specification and the Examiner simply ignores the clear teaching.

However, to facilitate allowance of the claims, the four independent claims have been amended to include further limitations not even suggested, much less taught, by the applied references. Specifically, each of the independent claims now require that the Programmable Metallization Cell (PMC) be programmed by changing the resistance between first and second electrodes. The device of Sekiguchi et al. references is not a Programmable Metallization Cell and uses a capacitor for programming. It does not change the resistance between two electrodes.

Further, new dependent claims 20 and 21 also require that dendrites be formed or dissolved between the two electrodes to change the resistance. There is simply nothing in any of the references of record that even suggests these new limitations and the claims are therefore allowable.

Therefore, all of the independent claims are believed to be allowable for the reasons discussed above, and all of the dependent claims are also allowable for depending from a claim deemed allowable as well as for their own limitations.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Applicants' attorney, at 972-732-1001 so that such issues may be resolved as expeditiously as possible. In the event that the enclosed fees are insufficient, please charge any additional fees required to keep this application pending, or credit any overpayment, to Deposit Account No. 50-1065.

Respectfully submitted,

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Date

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